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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/720,038

11/20/2003

Akihiro Kohno

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05/18/2007

CANON U.S.A. INC. INTELLECTUAL PROPERTY DIVISION  
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EXAMINER

LIEW, ALEX KOK SOON

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

05/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/720,038	<b>Applicant(s)</b> KOHNO, AKIHIRO	
	<b>Examiner</b> Alex Liew	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 2 and 8 are objected to because of the following informalities:

On lines 4 – 6 of claim 2, “these angles being different from those included in the attribute information of the first image data unit,” the examiner cannot find any other type of angles disclosed in the specification other than pan angles, tilt angles and zoom angles. Further explanation is required.

With regards to claim 8, see the discussion of claim 2.

### ***Claim Rejections - 35 USC § 101***

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 13 is drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

“Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer.”

“Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure’s functionality to be realized.”

Claim 13, while defining a computer program, does not define a “computer-readable medium” and is thus non-statutory for that reasons. A computer program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on “computer-readable medium” in order to make the claim statutory.

“In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure’s functionality to be realized, and is thus statutory.” - MPEP 2106.IV.B.1(a)

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3 – 7 and 9 – 14 are rejected under U.S.C. 102(b) as being anticipated by Shiiyama (US pat no 6,400,853).

With regards to claim 1, Shiiyama discloses a method for processing images comprising the steps of obtaining image data units and attribute information (see column 1 lines 61 – 67 – the label feature string or matrixes describes the feature of the image units data) thereof:

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- selecting a first image data unit from the image data units as a reference for measuring a similarity index (see figure 21A – is the image selected to be a reference image),
- comparing attribute information of first image data unit with attribute information of the remaining image data units other than the first image data unit (see column 11 lines 11 – 18 - where the specified image data units are used as reference to measure similarity with the some or all the image data units with the registered image data units) to determine a second image data unit to be used for measuring the similarity index (see figure 21B) and
- measuring the similarity index between the first image data unit and second image data unit (see figure 21C – the similarity values are calculated for the label matrixes).

With regards to claim 3, Shiiyama discloses a method for processing images according to claim 1, further comprising the steps of splitting each of the first image data unit and the second image data unit into a plurality of blocks (see figure 21A and B – ‘a’ to ‘i’ and ‘1’ to ‘9’ with each alphabet and numbers, respectively, representing a block) and measuring the similarity index between the first image data unit and the second image data unit on a block-to-block basis (see figure 21C).

With regards to claim 4, Shiiyama discloses a method for processing images according to claim 1, further comprising the steps of specifying a region for measuring the

similarity index in the first image data unit (see figure 21A and B – each row in each matrix is an specified region) and measuring the similarity index between the specified region in the first image unit and the corresponding region in the second image data unit (see figure 21C).

With regards to claim 5, Shiiyama discloses a method for processing images according to claim 4, further comprising the steps of splitting each of the first image data unit and the second image data unit into a plurality of blocks (see figure 21A and B the regions in row are further divided into blocks) and specifying at least one block to specify the region in the first image data unit (figure 21A is the first unit data).

With regards to claims 6, 7 and 13, see the rationale and rejection for claim 1.

With regards to claim 9, see the rationale and rejection for claim 3.

With regards to claim 10, see the rationale and rejection for claim 4.

With regards to claim 11, see the rationale and rejection for claim 5.

With regards to claim 12, see the rationale and rejection for claims 1 and 5.

With regards to claim 14, the algorithms discussed by Shiiyama are implemented into a computer where it requires programs stored in a storage medium to perform such algorithms.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiiyama ('853).

With regards to claim 2, Shiiyama discloses all the limitations discussed in claim 1, but does not disclose the second image data unit is not included in image data units having pan angles, tilt angles and zoom angles of a camera during capturing the image data units. However, Shiiyama discusses images can be taken from plurality of angles and may cause image retrieval errors (see column 1 lines 29 – 37) and Shiiyama propose the use of image labeling to identify features of the image. This labeling may include angle where the camera is positioned to capture images of the object or scene, allowing the image to be subjected to similarity comparison to be taken at plurality of angles with the potential of being identified and obtaining results to retrieve specified image, as shown in figure 21. One skill in the art would include capturing an image a plurality of

angles because the person being image does not have to remain at a static position, which causes strain for the person, giving more flexibility to the system.

With regards to claim 8, see the rationale and rejection for claim 2.

### **Conclusion**

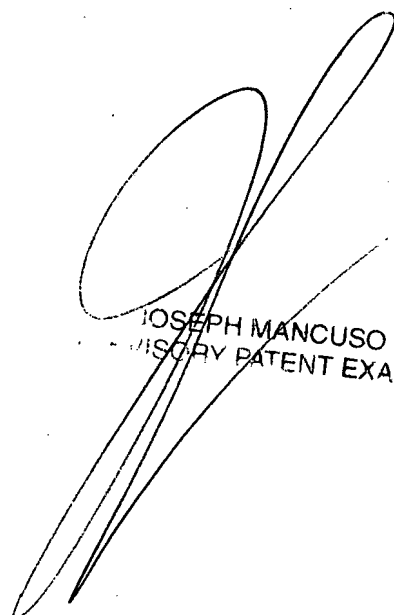
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Liew whose telephone number is (571)272-8623. The examiner can normally be reached on 9:30AM - 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571)272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alex Liew  
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5/9/07



JOSEPH MANCUSO  
PATENT EXAMINER